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ABSTRACT

The document studies the problem of student overload in vocational agriculture programs in the State of Washington, examining its impact on teaching effectiveness and shop safety. The present teaching load is compared with an evaluation of an acceptable teaching and student load. Two questionnaires collected data: (1) regarding the present teaching load (136 of 197 sent to vocational agriculture instructors were returned), and (2) evaluating an acceptable teaching load (335 of 469 sent to school superintendents, principals, and vocational agriculture instructors were returned). An analysis of the data concluded that: (1) not enough is known about the cooperative education program in vocational agriculture, (2) inadequate time for supervision is allowed for the majority of instructors, (3) majority of the programs need more instructors, (4) supervised farming projects and the Future Farmers of America are adversely affected by student overload, (5) 13 to 30 students should be able to be supervised in a cooperative education program, (6) an agriculture classroom should consist of 16-20 students, with shop classes between 14 and 16 students, and (7) 75-80 students is an acceptable teaching load. A series of 37 tables support the analysis. Questionnaires and form letters used in the study are appended. (Author/EC)

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A STUDY TO DETERMINE an ACCEPTABLE TEACHING LOAD in VOCATIONAL AGRICULTURE

Washington State University

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Robert E. Gallagher
Washington State University
June, 1975

ABSTRACT

Gallagher, Robert Emmet: A Study to Determine an Acceptable Teaching Load in Vocational Agriculture.

Purposes: (1) To determine the current class load of experienced vocational agriculture instructors. (2) To determine from superintendents, principals and experienced vocational agriculture instructors what an acceptable teaching load for a vocational agriculture instructor is in the state of Washington. (3) To determine what areas of a vocational agriculture program suffer as a result of teacher overload. (4) To determine the optimum and maximum student load for effective and safe instruction in the vocational agriculture classroom and shop. (5) To determine what areas should be emphasized in the vocational agriculture program. (6) To determine what is adequate supervision time per week or per student for classroom and shop preparation, FFA, supervised farming projects, and cooperative education programs. (7) To determine the role of adult education in the vocational agriculture program.

Methods: The data was collected by 2 questionaires; 1 on current teaching load mailed to vocational agriculture instructors and 1 on acceptable teaching load mailed to school superintendents, principals and vocational agriculture instructors. Information gathered included; from the current teaching load questionaire, (1) full and part time vo-ag instructors, (2) number of vo-ag instructors in each vo-ag program reporting, (3) number of periods taught,(4) amount of preparation time, (5) number of individual students taught, (6) number of supervised farming projects, (7) number of students in cooperative education programs, (8) supervision time allowed during regular school day, (9) number of FFA members, (10) hours spent supervising the FFA, (11) number of horticulture classes, (12) number

of forestry classes, (13) adequacy of supervision time allowed, (14) adequacy of facilities, (15) current enrollment trend, (16) addition or reduction of vo-ag instructors in those agriculture programs responding, (17) areas requiring the most amount of time, (18) areas suffering from student overload, (19) adults currently enrolled in adult education classes, (20) hours of adult education taught per week. The second part deals with the opinions of school superintendents, principals and vocational agriculture instructors on an acceptable teaching load in vo-ag. The evaluation includes opinions on; (1) optimum vo-ag classroom load, (2) maximum vo-ag classroom load, (3) Optimum vo-ag shop load, (4) maximum vo-ag shop load, (5) adequate preparation time, (6) hours to supervise the FFA, (7) Hours to supervise supervised farming projects, (8) number of students in cooperative education program, (9) hours to supervise cooperative education program, (10) where most amount of time should be spent, (11) areas of too much effort, (12) areas needing more effort, (13) acceptable teaching load, (14) maximum acceptable teaching load, (15) involvement with adult education, (16) adult education load consideration, (17) Acceptability of current vo-ag student load.

Findings: Inadequate time for supervision of the total vocational agriculture program is allowed for the majority of the vocational agriculture instructors. The majority of the vocational agriculture programs in Washington need more vo-ag instructors than they already have. A majority of the vo-ag shops are inadequate. Enrollment in the vo-ag programs is 23.6 times as great on the increase than on the decrease.

Supervised farming projects and the FFA are the first to suffer as a result of a student overload in vo-ag. Between 5 to 8 hours each per week is needed to supervise the FFA and supervised farming projects.

Thirteen to 30 students should be able to be supervised in a cooperative education program allowing from 1/2 to 1 hour per student per

week for supervision by the vo-ag instructor.

Junior and community colleges are teaching a major portion of the adult education.

Between 16 and 20 students is the optimum in an agriculture classroom and the maximum is 25. In a vo-ag shop class there should be between 14 and 16 students but the maximum is 19. One class period per day is sufficient time for preparation for the classroom and shop. Most of the time should be spent in the classroom and shop. More effort should be exerted in the supervised farming projects, FA, shop, and classroom.

An acceptable teaching load in vo-ag is between 75 and 80 individual students and when the number of individual students reaches between 90 and 100 an additional teacher is needed.

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INTRODUCTION

The Problem

An excessive teaching load is one that undoubtably faces every teacher in the profession at one time or another. It may manifest itself when an additional teacher is needed to adequately meet the agricultural education of a community.

In Washington, it is believed that occupational experience programs, such as supervised farming and cooperative experience programs are basic to vocational agriculture. It is also believed that the FFA should be an integral part of the vocational agriculture program. To provide adequate programs in these areas seems too much to expect of a teacher who has 90, 100, or 125 different individuals enrolled in his classes.

Need for the Study

The vocational agriculture program includes many major areas. General agriculture, supervised farming projects, occupational experience programs, Future Farmers of America, and adult education are these major areas. The problem exists in regard to the number of students that can be effectively taught by each vocational agriculture instructor without at least one of the major areas in Vo-Ag suffering. Each student needs to be properly supervised in the classroom and shop, a supervised farming project or occupational education project, as well as being supervised as a member of the student leadership activities offered by the FFA.

The completion of the study designed to elicit the present teaching load and compare it to an evaluation of an acceptable teaching load along with computing what an acceptable vocational

agriculture student load would undoubtably increase the effectiveness of the high school vocational agriculture classroom and shop.

Statement of the Purposes

The purposes of the study were:

1. To determine the current class load of experienced vocational agriculture instructors.

2. To determine from school superintendents, principals, and vocational agriculture instructors what an acceptable teaching load for vocational agriculture is in the state of Washington.

3. To determine what areas of a vocational agriculture program suffer as a result of teacher overload.

4. To determine what areas should be emphasized in the vocational agriculture program.

5. To determine the optimum and maximum student load for effective and safe instruction in the vocational agriculture classroom and shop.

6. To determine what is adequate supervision time is per student of per week for classroom and shop preparation, FFA, supervised farming projects and cooperative experience programs.

7. To determine the role of adult education in the vocational agriculture program.

In this study the writer believed that he could create an awareness in the school superintendents, principals and instructors of vocational agriculture to the point where the vocational agriculture program and students suffer because of an unacceptable student load. The writer attempted to encourage school administrators and Vo-Ag instructors not to overload the agriculture classes and shops to a point where the effectiveness and safety suffered.

Limitations of the Study

This particuliar study was limited to the vocational agriculture programs in the state of Washington.

Definition of Terms

Vocational Agriculture. A public program having the responsibility for providing the knowledge and skills needed for success in both on-farm and off-farm agricultural vocations. The aim of the program is to train present and prospective agricultural workers for proficiency in agricultural occupations. Vocational agriculture came into prominence with the passage of the Smith-Hughes Act of 1917.

Agricultural Classroom. Instruction to vocational agriculture students in the classroom requiring the use of adequate teaching materials and facilities, including preparation time for visual aids, references, and bulletins. Students engage in a supervised study of various teaching methods that provide current information on agriculture.

Agricultural Shop. Instruction to vocational agriculture students in the agricultural shop to provide a basic foundation in the safe and effective use of tools and materials for use in the agricultural field. Current materials on construction, machinery and methods dealing with agriculture are presented.

FFA. The Future Farmers of America is the national organization of students in vocational agriculture and is considered and integral part of the vocational agriculture program. The aims and purposes of the FFA are concerned with leadership and character development, cooperation, service, thrift, sportsmanship, improvement in agriculture and citizenship.

Supervised Farming Projects. This program consists of various activities carried out under the supervision of the vocational agriculture instructor. Included in the program are enterprise and improvement projects. These projects are usually carried out at the students home. A supervised farming program in the local vocational agriculture program is required of every student in the state of Washington.

Cooperative Education Program. A cooperative vocational agriculture class in which students receive instruction in the classroom and on the job in an agricultural occupation. The student each day spends time at school and time at work. A student in cooperative experience activities may substitute this for a supervised farming project.

Acceptable Teaching Load. The number of students per day which can be effectively taught and supervised by a vocational agriculture instructor. The determination of this load accounts for the amount of time spent effectively instructing and supervising students in the agriculture class and shop, supervising students in supervised farming projects and cooperative experience programs, and supervising the local chapter of the Future Farmers of America.

METHOD OF PROCEDURE

The method of procedure for the study was done in three phases.

1. First Phase of the Study

The first phase of the study was to review similiar studies already completed. Only one similiar study was done and that was by John Hash in Virginia in 1964. The review was designed to find the familiar and different goals of the study. After reviewing

this literature, the writers designed two questionaires to elict two major types of data. The first questionaire covers the present vocational agriculture teaching load. The second questionaire is an evaluation of an acceptable teaching load. The survey instruments were divided into areas where vocational agriculture student overloads could occur.

2. Second Phase

Copies of the questionaire elicting present teaching load were sent to vocational agriculture instructors throughout the state of Washington. The other questionaire evaluating an acceptable vocational agriculture teaching load was sent to school superintendents, principals and vocational agriculture instructors in those districts which have vocational agriculture.

A total of 197 present teaching load questionaires were mailed and 136 or sixty nine percent were returned. A total of 469 of the acceptable teaching load questionaires were mailed and 335 or seventy-one percent were returned. However the writer found 12 of these questionaires were sent back blank so no data could be utilized for the study from these.

3. Third Phase

The questionaires were summarized and hand tabulated. The writer notes that comments on many questionaires helped him to make recommendations and conclusions on this study.

ANALYSIS OF DATA

The presentation of data reported on teaching load was summarized in two areas. The first area dealt with information from the current teaching load of vocational agriculture instructors. Those questions dealt with: (1) number of full-time and part time vocational agriculture instructors, (2) number of vocational agriculture instructors in each agriculture program reporting, (3) number of periods currently taught by the vocational agriculture instructors, (4) amount of preparation time allowed for agricultural classes and shops per day, (5) number of individual students taught by the vocational agriculture instructor, (6) number of students with supervised farming projects, (7) number of students in an approved vocational agriculture cooperative education program, (8) amount of supervision time allowed during regular school day for supervised farming projects and cooperative experience programs, (9) number of FFA members in the agricultural leadership club, (10) amount of hours spent per week supervising the FFA, (11) number of hours spent instructing horticulture classes per day, (12) number of hours spent instructing forestry classes per day, (13) adequacy of supervision time allowed for vocational agriculture program, (14) adequacy of the vocational agriculture classroom and shop facilities, (15) current vocational agriculture enrollment trend, (16) addition or reduction of vocational agriculture instruct in those agriculture programs responding, (17) areas requiring the most amount of time by the vocational agriculture instructor, (18) areas suffering from student overload in vo-

cational agriculture, (19) number of adults currently enrolled in classes taught by the vocational agriculture instructor, (20) number of hours of adult education taught per week by the vocational agriculture instructor. The second part deals with the opinions of school superintendents, principals and vocational agriculture instructors on an acceptable teaching load in vocational agriculture. The evaluation included opinions on: (1) optimum vocational agriculture classroom load, (2) maximum vocational agriculture classroom load, (3) optimum vocational agriculture shop load, (4) maximum vocational agriculture shop load, (5) adequate preparation time for classroom and shop per day in vocational agriculture, (6) hours required per week to properly supervise the FFA, (7) hours required per week to properly supervise student supervised farming projects, (8) number of students in vocational agriculture cooperative education program that can be effectively handled, (9) hours required per student per week to properly supervise students in cooperative education programs, (10) areas where the most amount of time should be spent in the vocational agriculture program by the instructor, (11) areas in vocational agriculture where too much effort is being placed, (12) areas in vocational agriculture where more effort and emphasis needs to be placed, (13) an acceptable teaching load for vocational agriculture, (14) student load in vocational agriculture that requires procurance of an additional vocational agriculture instructor, (15) involvement of the vocational agriculture instructor with adult education, (16) adult education load consideration on an acceptable teaching load in vocational agriculture, (17) the

acceptability of the current vocational agriculture student load of those reporting.

Each of these areas are presented individually before advancing to the next area. Summaries, conclusions, and recommendations are proposed at end of all presented data.

Number of Full-time and Part-time Vocational Agriculture Instructors

The data compiled in Table I and Table Ia recorded the number of full-time and part-time vocational agriculture instructors in the 136 agriculture teachers who responded and how many classes the part-time vocational agriculture instructor taught other than agricultural classes.

TABLE I

FULL-TIME AND PART-TIME VOCATIONAL AGRICULTURE INSTRUCTORS

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
Full-time	105	77
Part-time	31	23
TOTAL	136	100

TABLE Ia

CLASSES TAUGHT OTHER THAN AGRICULTURE

NUMBER OF CLASSES	NUMBER OF INSTRUCTORS	PERCENT
No Answer	2	6
1/2	1	3
1	8	26
2	12	39
3	5	17
4	2	6
5	1	3
TOTAL	31	100

Seventy-seven percent of the vocational agriculture instructors are full- time. In Table Ia it is interesting to note that the part-time vocational agriculture instructors averaged around 2 classes they taught other than agriculture. In the writers opinion, this is a waste of trained agriculture teachers. In a 5 period day this amounts to a 40 percent nonutilization of the vocational agriculture instructor.

Number of Vocational Agriculture Instructors In Each Agricultural Program

Table II reports that 48 percent of the vocational agriculture programs are one man departments. Also notice that in Table II that 47 percent of those responding have departments of over one man.

It was the writers opinion that the vocational agriculture programs are becoming larger and will continue to expand thus

requiring more vocational agriculture instructors per department.

TABLE II

NUMBER OF VO-AG INSTRUCTORS IN LOCAL PROGRAM

NUMBER OF INSTRUCTORS	DEPARTMENTS REPORTING (136)	PERCENT (100)
No Answer	4	3
1/2	1	1
4/7	1	1
1	66	48
1 1/5 up to 1 1/2	3	2
1 1/2	3	2
2	35	26
2 1/5 to 3	14	10.5
4	2	1.5
8	7	5

Number of Periods Taught

As Table III illustrates, 86 percent of the vocational agriculture instructors are teaching 5 or 6 periods per day. These are the most common found in the state of Washington.

TABLE III

PERIODS TAUGHT PER DAY BY 136 VO-AG INSTRUCTORS

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
No Answer	2	2
3	7	5
4	8	6
5	81	59
6	37	27
7	1	1

Preparation Time Allowed During Regular School Day

Eighty-four percent of the vocational agriculture instructors utilized one class period per day in the 1974-75 school year. The amount of preparation time during the school day is summarized in Table IV. It was the writers opinion that preparation time during the regular school day was vital in increasing the effectiveness and safety of a vocationa agriculture program.

TABLE IV

PERIODS OF PREPARATION TIME ALLOWED DURING REGULAR SCHOOL DAY

PERIODS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	3	2
None	14	10
Less than 1 class period	5	4
1 class period	114	84
TOTAL	136	100

Number of Individual Students

Thirty-six of the vocational agriculture instructors reported they taught between 75 and 99 individual students. Thirty-nine percent reported they were instructing over 100 students. This 75 percent or 102 responses is shown in Table V. It is the writers belief that most of these instructors could not instruct, supervise FFA and supervised farming projects as well as coordinate cooperative experience activities with this many students.

TABLE V

NUMBER OF INDIVIDUAL STUDENTS TAUGHT BY 136 VOCATIONAL AGRICULTURE INSTRUCTORS

NUMBER OF STUDENTS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	5	4
0-49	12	9

TABLE V CONT.

NUMBER OF STUDENTS	NUMBER OF INSTRUCTORS	PERCENT
50-74	17	12
75-99	49	36
100-125	41	30
Over 125	12	9
Total	136	100

Number of Students With Supervised Farming Projects

When Table V and Table VI are compared it is interesting to note that 102 or 75 percent of those responding have over 75 students yet as shown in Table VI only 23 or 17 percent of the vocational agriculture instructors have over 75 students which have supervised farming projects. It is the writers opinion that those vocational agriculture instructors who have over 75 students are not able to adequately supervise over 75 supervised farming projects. It isfurther reasoned that supervised farming projects are one of the first areas in vocational agriculture to suffer as a result of student overload.

TABLE VI

NUMBER OF STUDENT SUPERVISED FARMING PROJECTS AS REPORTED BY 136 VO-AG INSTRUCTORS

NUMBER OF STUDENTS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	2	2
None	11	8
1-25	36	26
26-50	47	34
51-75	17	13
Over 75	23	17
TOTAL	136	100

Number of Students in an Approved Cooperative Education Program

Table VII illustrates the neglect of one of the major areas of a vocational agriculture program. Fifty-one percent of the vocational agriculture instructors polled did not have any students involved in cooperative education. Forty percent reported less than 30 students in an approved cooperative education program. It is the writers belief that since the philosophy of a vocational program is the gainful employment and training in agricultural occupations of those students enrolled that there is no better way than to present a practical, hands-on, on the job training as is offered by a cooperative education program. It is also the writers belief that the reason for such a small percentage of vocational agriculture instructors with students in cooperative education programs is the lack of knowledge in the setting up and implementation of a cooperative education program.

TABLE VII

STUDENTS IN APPROVED COOPERATIVE EDUCATION PROGRAMS AS REPORTED BY 136 VO-AG INSTRUCTORS

NUMBER OF STUDENTS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	4	3
None	70	51
1-10	31	23
11-20	16	12
21-30	7	5
Over 30	8	6
TOTAL	136	100

Regular School Day Supervision Time Allowed Per Week

Seventy-five percent of those vocational agriculture instructors

who responded reported they were not allowed or given any time whatsoever during the regular school day for supervision of cooperative experience projects and supervised farming projects. It is the writers opinion that the reason for this may be the school district considering that this supervision is covered in a vocational agriculture extended contract.

TABLE VIII

HOURS ALLOWED FOR SUPERVISION OF SUPERVISED FARMING PROJECTS AND COOPERATIVE EXPERIENCE PROGRAMS DURING THE REGULAR SCHOOL DAY PER WEEK

NUMBER OF HOURS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	4	3
None	103	75
1-4	23	17
5-8	5	4
9-12	1	1
Over 12	0	0
TOTAL	136	100

Without some time allotment during the regular school day for supervision, it is easy to see why supervised farming projects and cooperative experience projects probably will be the areas to suffer first as a result of a student overload in vocational agriculture.

The Number of FFA Members in Vo-Ag Departments as Reported by 136 Vo-Ag Instructors

As previously recorded 102 vocational agriculture instructors reported more than 75 individual students under their supervision. Table IX shows that 78 percent of those polled had less than 70 students who were members of the national youth leadership club, the Future Farmers of America. Not understanding the benefits to the members, the writer believed, could be a reason for the lack of

many of the vocational agriculture students not belonging to the membership of the FFA.

TABLE IX

THE NUMBER OF STUDENTS IN VO-AG CLASSES WHICH ARE MEMBERS OF THE FFA

NUMBER OF STUDENTS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	4	3
None	5	3.5
1-10	13	10
11-20	17	13
21-30	15	11
31-40	21	15
41-50	16	12
51-60	8	5.5
61-70	7	5
71-80	10	7
81-90	5	3.5
91-100	7	5
101-110	6	4.5
111-150	2	2
TOTAL	136	100

The Number of Hours Spent Supervising the FFA Per Week

Fifty percent of the vocational agriculture instructors reported that they spent 7 or more hours each week supervising the FFA. It was the belief of the writer that the amount of hours each week spent working with the FFA helped to determine the relevance and effectiveness of a vocational agriculture program.

TABLE X

THE NUMBER OF HOURS SPENT SUPERVISING THE FFA PER WEEK AS REPORTED BY 136 VOCATIONAL AGRICULTURE INSTRUCTORS

NUMBER OF HOURS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	4	3
None	8	6
1-6	56	41
7-12	41	30
13-16	14	10
Over 16	13	10
TOTAL	136	100

The Number of Horticulture Classes Taught Per Day

Eleven percent of the vocational agriculture instructors stated that they taught more than 4 classes of horticulture per day. Over one half of those polled taught no horticulture at all. It was the writers opinion that this is caused from horticulture being a major area only in the last several years. Horticulture classes taught per day is summarized in Table XI

TABLE XI

THE HOURS OF HORTICULTURE CLASSES TAUGHT PER DAY BY VO-AG INSTRUCTORS

NUMBER OF HOURS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	2	1
None	69	51
1	36	26
2-3	15	11
4-5	13	10
6-7	1	1
TOTAL	136	100

The Number of Forestry Classes Taught Per Day

Table XII presents the information that forestry classes are not taught a major portion of the day. Only 1 percent of those reporting taught over 4 forestry classes per day. Sixty-nine percent of the vocational agriculture instructors taught no forestry classes at all. The forestry area is only industrially important in about one-half of the state of Washington and it is the belief of the writer that this is a major reason for the lack of forestry classes in the teaching of 94 vocational agriculture instructors.

TABLE XII

THE HOURS OF FORESTRY CLASSES TAUGHT PER DAY BY 136 VO-AG INSTRUCTORS

NUMBER OF HOURS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	1	1
None	94	69
1	28	20
2-3	12	9
4-5	1	1
6-7	0	0
TOTAL	136	100

Adequacy of Supervision Time For The Total Vocational Agriculture Program

TABLE XIII

THE ADEQUACY OF TIME ALLOWED FOR INSTRUCTION AND SUPERVISION OF THE VOCATIONAL AGRICULTURE PROGRAM BY 136 VOCATIONAL AGRICULTURE INSTRUCTORS

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
No Answer	3	2
Yes	43	32

TABLE XIII CONT.

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
No	88	65
Yes and No	2	1
TOTAL	136	100

Sixty -five percent or in other words 2 of every 3 vocational agriculture instructors felt that they received inadequate time for supervision of their total vocational agricuture program. The data showing this is reported in Table XIII. It was the writers opinion that a current student overload in vocational agriculture is the reason the major portion of agriculture instructors find they have inadequate supervision time.

Adequacy of Vo-Ag Classroom and Shop Facilities

It was interesting to note that in Table XIV, thirty-two percent of the vocational agriculture instructors reported their classroom facilities inadequate for their agriculture classes. Fifty-one percent reported that their agriculture shop was inadequate. Four vocational agriculture instructors wrote in that their greenhouses were inadequate. It was believed by the author that the current student overload in vocational agriculture is causing many problems of inadequate classroom and shop facilities in the agricultural programs.

TABLE XIV

THE ADEQUACY OF VOCATIONAL AGRICULTURE CLASSROOMS AND SHOPS AS REPORTED BY 136 VOCATIONAL AGRICULTURE INSTRUCTORS

RESPONSE	CLASSROOM NUMBER REPORTED	CLASSROOM PERCENT	SHOP NUMBER REPORTED	SHOP PERCENT	GREENHOUSE NUMBER REPORTED	GREENHOUSE PERCENT
Yes	87	68	54	49	0	0
No	41	32	56	51	4	100
TOTAL	128	100	110	100	4	100

Current Trend of Enrollment in Vocational Agriculture

Only 3 percent of the respondents in Table XV reported that the enrollemnt of their vocational agriculture programs was decreasing. In comparison, 71 percent reported that their enrollment was on the increase. This means that there are 23.6 times as many vocational agriculture programs that are increasing in enrollment as there are that are decreasing in enrollment. In the opinion of the writer it was believed that this continous growth in vocational agriculture is a major reason for the overload currently.

TABLE XV

THE CURRENT TREND OF ENROLLMENT IN 136 VO-AG PROGRAMS IN WASHINGTON

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
No Answer	3	2
Increasing	97	71
Decreasing	4	3
Remaining the Same	32	24
Total	136	100

The Addition or Reduction of Vocational Agriculture Instructors in Vocational Agriculture Programs as Reported by 136 Vo-Ag Instructors

Over one third (37 percent) of those vocational agriculture instructors responded they needed an extra vocational agriculture instructor in their program. Overall 56 percent reported that additional vocational agriculture manpower was needed. It was the writers opinion that student overload is a major area responsible. It was concluded by the writer that less students will have to be maintained or additional vocational agriculture instructors added in order to maintain an effective and safe vocational agriculture program.

TABLE XVI

THE ADDITION OR REDUCTION OF VO-AG INSTRUCTORS IN VO-AG PROGRAMS AS REPORTED BY 136 VO-AG INSTRUCTORS

RESPONSE	NUMBER OF INSTRUCTORS	PERCENT
No Answer	2	2
minus 1	2	2
remain the same	55	40
up to plus 3/4	16	12
plus 1	51	37
plus 2	9	6
plus 3	1	1

Areas Needing the Most Amount of Time as Reported by 136 Vo-Ag Instructors

The general consensus from Table XVII was that Classroom, followed by Shop were the most time consuming. Third was the youth leadership

group, the Future Farmers of America. Supervised farming projects and Cooperative Education Programs were ranked fourth and fifth respectively. It was the writers belief that classroom and shop were ranked the highest as each consumes up to 5 or 6 hours per day for the entire school year.

TABLE XVII

AREAS RANKED THAT REQUIRE THE MOST ACCOUNTING OF TIME FOR A VO-AG INSTRUCTOR PER WEEK

AREA	RANK	NUMBER OF INSTRUCTORS	PERCENT
Classroom	First	80	57
	Second	30	25
	Third	14	12
	Fourth	7	7
	Fifth	2	3
Shop	First	46	33
	Second	43	35
	Third	8	7
	Fourth	9	8
	Fifth	3	4
FFA	First	6	4
	Second	32	26
	Third	53	44
	Fourth	25	23
	Fifth	4	5

TABLE XVII CONT.

AREA	RANK	NUMBER OF INSTRUCTORS	PERCENT
Supervised Farming Projects	First	7	5
	Second	14	11
	Third	38	31
	Fourth	54	51
	Fifth	6	8
Cooperative Education Programs	First	2	1
	Second	4	3
	Third	7	6
	Fourth	12	11
	Fifth	62	80

In Table XVII, the percentages are computed for the number of firsts it received of all the firsts, percent of the seconds of all the seconds,etc.

Areas Suffering Because of Overload

Supervised farming projects are the immediate sufferers as a result of student overload as seen by responses of the vocational agriculture instructors. Forty-seven percent stated that supervised farming was their first choice. FFA supervision was indicated by the vocational agriculture instructors as the second area to suffer as a result of student overload in the agriculture program. It is the writers opinion that lack of time to supervise large numbers of students is the reason for supervised farming and FFA. in which the instructor works with small numbers or individuals, being the first to suffer from student overload.

As in Table XVII, the percentages are computed as to the number of firsts the area received of all the firsts, etc for second through fifth in Table XVIII.

TABLE XVIII

AREAS RANKED THAT SUFFER BECAUSE OF STUDENT OVERLOAD IN VOCATIONAL AGRICULTURE AS REPORTED BY 136 VO-AG INSTRUCTORS

AREA	RANK	NUMBER OF INSTRUCTORS	PERCENT
Classroom	First	11	8
	Second	19	15
	Third	37	30
	Fourth	40	36
	Fifth	15	22
Shop	First	14	11
	Second	6	5
	Third	21	17
	Fourth	39	36
	Fifth	22	33
FFA	First	21	16
	Second	49	39
	Third	36	30
	Fourth	15	14
	Fifth	2	3
Supervised Farming Projects	First	61	47
	Second	41	33
	Third	13	11
	Fourth	8	7
	Fifth	0	-

TABLE XVIII CONT.

AREA	RANK	NUMBER OF INSTRUCTORS	PERCENT
Cooperative Education Programs	First	23	18
	Second	10	8
	Third	15	12
	Fourth	8	7
	Fifth	28	42

Adults taught by 136 Vo-Ag Instructors

Only 26 percent of the vocational agriculture instructors responding reported teaching adults in adult education classes as recorded in Table XIX. It was the writers opinion that the junior and community colleges have met the needs of the major portion of those adults requesting adult education classes, thus reducing the need for the vocational agriculture instructors in adult education.

TABLE XIX

NUMBER OF ADULTS ENROLLED CURRENTLY IN ADULT EDUCATION CLASSES TAUGHT BY VO-AG INSTRUCTORS

NUMBER OF ADULTS	NUMBER OF INSTRUCTORS	PERCENT
No Answer	3	2
None	99	72
1-20	24	18
21-40	9	7
Over 40	1	1
TOTAL	136	100

Hours of Adult Education Taught by Vo-Ag Instructors

Table XX presents the information that of the 26 percent of those vocational agriculture instructors teaching adult education in Table XIX, the majority only teach from 1 to 3 hours of adult education per week. It was the writers belief that student overload as well as an effective junior and community college adult education program contributes to the few hours of adult education being taught by vocational agriculture instructors.

The second set of percentages in Table XX eliminates those responses of no answer and none.*

TABLE XX

NUMBER OF HOURS OF ADULT EDUCATION CLASSES TAUGHT EACH WEEK BY CURRENT VO-AG INSTRUCTORS

NUMBER OF HOURS	NUMBER OF INSTRUCTORS	PERCENT	PERCENT*
No Answer	4	3	--
None	99	72	--
1-3	27	20	80
4-6	4	3	12
7-9	2	2	8
Over 9	0	--	--
TOTAL	136	100	100

Table XXI through Table XXXVII begins the responses of three groups; school superintendents, principals, and vocational agriculture instructors. The number of respondents reported were 92 school superintendents, 95 principals, and 136 vocational

agriculture instructors.

The Most Satisfactory Number of Students in a Vo-Ag Classroom

It was interesting to note that 41 percent of vocational agriculture instructors reported that 16-18 students per class was an optimium number, while school administrators favored 19-22 students per class. After taking the averages of each response and computing a total average for the vocational agriculture instructors was found to be 16.6 students per class. Simultaneously, superintendents and principals agreed with an average of 20.1 students per class as recorded in Table XXI.

TABLE XXI

IDEALLY, THE MOST SATISFACTORY NUMBER OF STUDENTS THAT CAN BE TAUGHT EFFECTIVELY IN AN AGRICULTURE CLASS

NO. OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
5-12	11	8	2	2	2	2
13-15	31	23	5	5	7	8
16-18	56	41	23	24	21	23
19-22	32	24	41	44	35	38
23-26	3	2	20	21	21	23
27-30	--	--	2	2	3	3
No Answer	3	2	1	1	3	3
Over 30	--	--	1	1	--	--
TOTAL	136	100	95	100	92	100
	Average 16.6		Average 20.1		Average 20.1	

The Maximum Number of Students in a Vo-Ag Classroom

Seventy eight percent of the vocational agriculture instructors reported the the maximum student load in the classroom was between 16-24. Sixty six percent of the principal and sixty four percent of the superintendents reported the maximum student classroom load as between 21-28. The writer concluded that the vocational agriculture instructor would rate the maximum number that he/she could effectively instruct and supervise, using their past experience in regard to the success or unsuccessful supervision of a certain number of students in a classroom..

The school adminstrators would logically assume the maximum foreeconomic return to the district.

TABLE XXII

THE MAXIMUM NUMBER OF STUDENTS THAT CAN BE TAUGHT EFFECTIVELY IN AN AGRICULTURE CLASS

NO. OF Students	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	2	1	2	2	2	2
10-15	7	5	1	1	2	2
16-20	47	35	9	9	6	7
21-24	58	43	29	31	36	39
25-28	17	13	33	35	32	35
29-32	3	2	13	14	12	13
33-35	2	1	8	8	2	2
TOTAL	136	100	95	100	92	100
	Average 21.2		Average 25.4		Average 24.7	

The Optimum Number of Students in a Vo-Ag Shop

As shown in Table XXIII, 46 percent of the vocational agriculture instructors and 44 percent of the school principals reported 14-16 students as the optimum number in a vocational agriculture shop. But when the averages were computed, it was discovered that the vo-ag instructors reported 14.5 students as optimum while principals reported 16.3. The school superintendents reported 16.0 students as the optimum number to be in a vocational agriculture shop. It was the writers belief that in order to be able to effectively and safely instruct a vocational agriculture shop class a smaller student load is needed.

TABLE XXIII

IDEALLY, THE OPTIMUM NUMBER OF STUDENTS THAT CAN BE TAUGHT EFFECTIVELY AND SAFELY IN AN AGRICULTURE SHOP CLASS

NO. OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	7	5	2	2	4	4
1-6	1	1	0	--	2	2
7-10	10	7	3	3	3	3
11-13	27	20	8	9	9	10
14-16	62	46	42	44	32	35
17-20	29	21	36	38	38	42
21-28	0	--	3	3	4	4
29-31	0	--	1	1	0	--
TOTAL	136	100	13	100	92	100
	Average 14.5		Average 16.3		Average 16.0	

The Maximum Number of Students in a Vo-Ag Shop

Eighty-three percent of the vocational agriculture instructors and 58 and 57 percent of the principals and superintendents respectively reported the maximum number in a vo-ag shop should not exceed 20 students as shown in Table XXIV. It was the writers belief and that of several of the respondents that 20 students in a vocational agriculture shop is also highly dependent upon the facilities. The writer concluded that the maximum student load of the facilities be the first determination followed second by the recommended maximum student load in an agriculture shop as determined by school superintendents, principals and vocational agriculture instructors.

TABLE XXIV

THE MAXIMUM NUMBER OF STUDENTS THAT CAN BE TAUGHT EFFECTIVELY AND SAFELY IN AGRICULTURE SHOP CLASSES

NO. OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	10	7	4	4	5	5
7-10	1	1	0	--	0	--
11-13	6	5	4	4	3	3
14-16	42	31	20	21	17	19
17-20	63	46	31	33	32	35
21-24	14	10	34	36	35	38
25-31	0	--	2	2	0	--
TOTAL	136	100	95	100	92	100
	Average 17.3		Average 19.1		Average 19.2	

Adequate Preparation Time

Ninety-one percent of the principals incicated that 1 class period per day was adequate time for preparation for classroom and shop. Eighty-two percent of the superintendents and 72 percent of the vocational agriculture instructors agreed. In the writers opinion it was evident that 1 class period would adequately suffice for preparation time per day.

TABLE XXV

ADEQUATE PREPARATION TIME FOR VOCATIONAL AGRICULTURE CLASSES AND SHOPS PER DAY

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	5	4	3	3	5	5.5
Less than 1 class period	3	2	2	2	5	5.5
1 class period	98	72	86	91	80	87
2 class periods	30	22	4	4	2	2
TOTAL	136	100	95	100	92	100

Hours Needed to Supervise the FFA

Instructors of vocational agriculture reported an average of 7.6 hours per week to supervise the FFA as shown in Table XXVI. Principals averaged 5.3 while superintendents averaged 5.2 hours needed. The writer believed that at least 7 hours per week would be adequate to supervise the FFA depending on the program. The writer concluded that the vocational agriculture instructors through their experience would be knowledgeable in the amount of time needed to supervise an effective FFA.

TABLE XXVI

THE NUMBER OF HOURS A VOCATIONAL AGRICULTURE INSTRUCTOR SHOULD SPEND SUPERVISING THE FFA PER WEEK

NUMBER OF HOURS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	8	6	9	10	6	7
None	1	1	2	2	1	1
1-6	57	42	60	63	65	71
7-12	56	41	21	22	15	16
13-16	6	4	2	2	4	4
17-20	4	3	1	1	0	--
Over 20	4	3	0	--	1	1
TOTAL	136	100	95	100	92	100
	Average 7.6		Average 5.3		Average 5.2	

Hours Needed to Supervise Supervised Farming Projects

It is interesting to note that in Table XXVII the 3 groups agreed with averages of 7.0, 5.6, and 5.3 hours that between 5 and 8 hours should be spent with supervised farming projects per week. In the writers opinion, the hours utilized with supervised farming projects per week contribute significantly to the effectiveness of the vocational agriculture program as a whole.

TABLE XXVII

THE NUMBER OF HOURS A VOCATIONAL AGRICULTURE INSTRUCTOR SHOULD SPEND WITH SUPERVISED FARMING PROJECTS PER WEEK

NUMBER OF HOURS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	11	8	15	16	11	12
None	2	1	1	1	1	1
1-4	31	23	32	33.5	33	36

TABLE XXVII CONT.

NUMBER OF HOURS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS MUNBER	SUPERINTENDENTS PERCENT
5-8	54	40	32	33.5	37	40
9-12	28	21	14	15	9	10
13-16	7	5	0	--	1	1
Over 16	3	2	1	1	0	--
TOTAL	136	100	95	100	92	100
	Average 7.0		Average 5.6		Average 5.3	

Students Supervised Effectively in a Cooperative Education Program

The major responses indicated by Table XXVIII that cooperative education programs in vocational agriculture should not exceed 30 students. It is also interesting to note in Table XXVIII and the following Table XXIX that cooperative education programs in vocational agriculture are not understood by one third to one half of those responding by the lack of answers. Also presented is the percentages eliminating those not responding to the question.*

TABLE XXVIII

THE NUMBER OF STUDENTS THAT CAN BE SUPERVISED IN A COOPERATIVE EDUCATION PROGRAM

NUMBER OF HOURS	VO-AG INST. NO.	VO-AG INST. PERCENT	VO-AG INST. PERCENT*	PRINCIPALS NO.	PRINCIPALS PERCENT	PRINCIPALS PERCENT*	SUPERINTENDENTS NO.	SUPERINTENDENTS PERCENT	SUPERINTENDENTS PERCENT*
No Answer	46	34	--	32	34	--	47	51	--
None	1	1	1	1	1	1	1	1	2
1-10	36	27	40	16	17	26	11	12	25
11-20	38	28	43	15	16	24	14	16	31
21-30	10	7	12	20	21	32	8	9	18
31-39	2	1	1	0	--	--	0	--	--
40-50	3	2	3	7	7	11	4	4	9
60-70	0	--	--	1	1	1	2	2	4

TABLE XXVIII CONT.

NUMBER OF HOURS	VO-AG INST. NO.	PERCENT	PERCENT*	PRINCIPALS NO.	PERCENT	PERCENT*	SUPERINTENDENTS NO.	PERCENT	PERCENT*
75-90	0	--	--	1	1	1	2	2	4
100-125	0	--	--	3	3	5	4	4	9
TOTAL	136	100	100	95	100	100	92	100	100
	Average 13.3			Average 30.5			Average 29.7		

Supervision of Cooperative Education

Table XXIX needs to be considered with the elimination of those respondents with no answer. Over 37 percent of each of the three groups reported no answer. Utilizing the percentages without those not answered reveals 67 percent of the vocational agriculture instructors and superintendents reported that 1/2 to 1 hour is needed to supervise cooperative education per student per week. It is interesting to note that this is the only area where the vocational agriculture instructors average falls between the averages of the principals and superintendents. It was believed by the writer that those reporting 6 or more hours per student per week did not understand the question because if an instructor had 10 students this would require 60 hours per week.

TABLE XXIX

THE NUMBER OF HOURS REQUIRED FOR SUPERVISION OF EACH STUDENT IN A COOPERATIVE EDUCATION PROGRAM PER WEEK

NUMBER OF HOURS	VO-AG INST. NO.	PERCENT	PERCENT*	PRINCIPALS NO.	PERCENT	PERCENT*	SUPERINTENDENTS NO.	PERCENT	PERCENT*
No Answer	50	37	--	43	46	--	58	63	--
None	1	1	1	0	--	--	0	--	--
Up to 1/2	6	4	7	5	5	9	3	4	9
1/2 to 1	57	42	67	22	23	42	23	24	67

TABLE XXIX CONT.

NUMBER OF HOURS	VO-AG INST. NO.	VO-AG INST. PERCENT	VO-AG INST. PERCENT*	PRINCIPALS NO.	PRINCIPALS PERCENT	PRINCIPALS PERCENT*	SUPERINTENDENTS NO.	SUPERINTENDENTS PERCENT	SUPERINTENDENTS PERCENT*
2	7	5	8	10	11	19	3	4	9
3	4	3	5	4	4	8	0	--	--
4	3	2	4	2	2	4	2	2	6
5	4	3	5	4	4	8	2	2	6
6-8	2	1	1	4	4	8	1	1	3
10	0	--	--	1	1	2	0	--	--
12	1	1	1	0	--	--	0	--	--
15	2	1	1	0	--	--	0	--	--
TOTAL	136	100	100	95	100	100	92	100	100
	Average 2.0			Average 2.3			Average 1.6		

Areas Where Most Time Should be Spent

Table XXX includes 5 areas (Classroom, Shop, FFA, Supervised Farming, and Cooperative Education) which were ranked 1 to 5 where the most amount of time should be spent by the vocational agriculture instructor with the number 1 representing the most amount of time and the number 5 the least amount of time. The percentages represent the number of firsts of all the firsts, the number of seconds of all the seconds,etc..

Vocational agriculture instructors ranked classroom first followed by shop and FFA. Principals and superintendents agreed on their first 3 choices of classroom and then shop then supervised farming. Cooperative education was ranked fifth by all three groups. It was the writers belief that cooperative education was ranked fifth by all three groups because of a lack of understanding or familiarity with the program.

TABLE XXX

AREAS RANKED TO WHERE THE MOST TIME SHOULD BE SPENT BY THE VOCATIONAL AGRICULTURE INSTRUCTOR

AREA	RANK	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Classroom	1st	90	67	67	74	60	71
	2nd	27	22	19	21	21	24
	3rd	5	4	3	3	3	4
	4th	6	5	0	--	1	1
	5th	2	2	0	--	0	--
Shop	1st	32	24	22	24	24	28
	2nd	61	49	58	65	61	70
	3rd	8	6	1	1	0	--
	4th	9	7	5	6	1	1
	5th	4	3	2	3	1	2
FFA	1st	5	4	0	--	0	--
	2nd	23	18	2	2	2	2
	3rd	54	42	27	31	24	28
	4th	39	33	35	41	28	31
	5th	6	7	21	30	0	--
Supervised Farming	1st	7	5	2	2	1	1
	2nd	14	11	9	10	2	2
	3rd	51	41	43	49	50	58
	4th	52	44	28	33	39	43.5
	5th	1	1	6	8	24	37

TABLE XXX CONT.

AREA	RANK	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
Cooperative Education	1st	0	--	0	--	0	--
	2nd	0	--	2	2	2	2
	3rd	9	7	14	16	9	10
	4th	13	11	17	20	21	23.5
	5th	81	89	42	59	40	63
TOTAL		1st's - 100% 2nd's - 100% 3rd's - 100% 4th's - 100% 5th's - 100% for each group					

Areas of Too Much Effort

TABLE XXXI

TOO MUCH TIME AND EFFORT BEING PLACED IN AREAS OF VOCATIONAL AGRICULTURE

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	16	12	17	18	19	21
Yes	34	25	20	21	17	18
No	86	63	58	61	56	61
TOTAL	136	100	95	100	92	100

In Table XXXI, 25 percent of the vocational agriculture instructors, 21 percent of the principals, and 18 percent of the superintendents reported that there were areas where too much effort were placed. The writer questioned whether this minority of the 3 groups is of a significance.

TABLE XXXIa

AREAS WHERE TOO MUCH TIME IS BEING PLACED

AREA	VO-AG INST. NO.	VO-AG INST. PERCENT	PRINCIPALS NO.	PRINCIPALS PERCENT	SUPERINTENDENTS NO.	SUPERINTENDENTS PERCENT	OVERALL NO.	OVERALL PERCENT
FFA	7	24.1	7	34	3	22	17	26.5
Judging Contests	7	24.1	3	15	1	7	11	17
Classroom	2	7	2	9	5	36	9	14
Shop	2	7	4	19	0	--	6	10
Completing Forms	4	14	2	9	0	--	6	10
Supervised Farming	1	3.4	2	9	1	7	4	6
Vo-Ag Meetings	1	3.4	0	--	1	7	2	3
Cooperative Education	1	3.4	0	--	0	--	1	1.5
Curriculum Development	1	3.4	0	--	0	--	1	1.5
Facilities	1	3.4	0	--	0	--	1	1.5
Animal Husbandry	0	--	1	5	0	--	1	1.5
Community Activities	0	--	0	--	1	7	1	1.5
Farming	1	3.4	0	--	0	--	1	1.5
Summer Contract	0	--	0	--	1	7	1	1.5
On-Campus Activities	1	3.4	0	--	0	--	1	1.5
Automobiles	0	--	0	--	1	7	1	1.5
TOTAL	29	100.0	21	100	14	100	64	100.0

Table XXXIa lists the areas which are regarded as ones where too much effort is being placed. The area which ranked highest was the FFA by the principals and vocational agriculture instructors. Superintendents ranked the classroom as the major area where too much effort is being exerted. In the case of the vocational agriculture instructors, judging was tied with FFA. Superintendents also placed judging contests in the top 2 areas. Principals ranked shop as their second choice then followed by judging contests. Other major areas recieving mention of too much attention were completion of forms and supervised farming projects.

Areas Which Need More Effort

TABLE XXXII

MORE TIME AND EFFORT NEEDING TO BE PLACED IN AREAS OF VOCATIONAL AGRICULTURE

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Amswer	17	13	15	16	24	26
Yes	89	65-75*	40	42-50*	32	35-47*
No	30	22-25*	40	42-50*	36	39-53*
TOTAL	136	100	95	100	92	100

Table XXXII presents the responses to whether there are areas which need more effort exerted. Elimination of those not responding to the question finds that 75 percent of the vocational agriculture instructors, 50 percent of the principals and 47 percent of the superintendents reported that there were areas where more time and effort needs to be placed* It was believed by the writer that this represents a significant number of the 3 groups and would be valid in shedding some light on what the areas are which need more effort.

TABLE XXXIIa

AREAS WHERE MORE TIME NEEDS TO BE SPENT

AREA	VO-AG INST. NO,	VO-AG INST. PERCENT	PRINCIPALS NO.	PRINCIPALS PERCENT	SUPERINTENDENT NO.	SUPERINTENDENT PERCENT	OVERALL NO.	OVERALL PERCENT
Supervised Farming	50	47	15	36	8	23	73	40
Shop	5	5	12	29	9	26	26	15
FFA	19	18	4	10	0	--	23	13
Classroom	11	10	6	15	5	15	22	12
Cooperative Education	8	7	1	2	3	9	12	7
The whole program	1	1	1	2	4	12	6	3
Individual student Attn.	3	3	0	--	1	3	4	2
Horticulture	2	2	0	--	0	--	2	1
Greenhouses	2	2	0	--	0	--	2	1
Instructors	0	--	1	2	1	3	2	1
Adult Education	1	1	0	--	0	--	1	.5
Field Trips	1	1	0	--	0	--	1	.5
Facilities	0	--	1	2	0	--	1	.5
Advisory Council	0	--	1	2	0	--	1	.5
Special Education Students	0	--	0	--	1	3	1	.5
Laboratory	0	--	0	--	1	3	1	.5
Crops	1	1	0	--	0	--	1	.5
Survival Skills	0	--	0	--	1	3	1	.5
Forestry	1	1	0	--	0	--	1	.5
Soil Contests	1	1	0	--	0	--	1	.5

As shown in Table XXXIIa, supervised farming, FFA, classroom, and cooperative education were the 4 highest ranking areas respectively as reported by vocational agriculture instructors. Supervised farming, shop, classroom, and FFA were the 4 highest ranking areas respectively as reported by principals. Shop, supervised farming, classroom, and the whole program were the 4 highest ranked by the superintendents. The overall consensus of the 3 groups lists those areas needing more effort as first- supervised farming, second- shop, third- FFA and fourth-classroom. It is interesting to note that these 4 areas were also listed in Table XXXIa as major areas where too much effort was being exerted. It is the writers belief that since the majority of the responses are found in areas needing more effort that positive action should be taken and exertion placed in these areas.

Acceptable Teaching Load in Vocational Agriculture

TABLE XXXIII

A FULL-TIME TEACHING LOAD IN A VOCATIONAL AGRICULTURE PROGRAM PER VO-AG INSTRUCTOR

NUMBER OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	9	7	3	3	9	10
40	8	6	3	3	1	1
50	11	8	1	1	4	4
60	21	15	5	5	4	4
70	26	19	7	8	7	8
80	41	30	16	17	24	26
90	11	8	22	23	23	12
100	9	7	34	36	29	32

TABLE XXXIII CONT.

NUMBER OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
125	0	--	3	3	2	2
150	0	--	1	1	0	--
TOTAL	136	100	95	100	92	100
	Average 71.8		Average 88.5		Average 85.7	

Vocational agriculture instructors, principals and school superintendents who responded to the questionaires recommended from 40 to 150 students per day for an acceptable teaching load in vocational agriculture. Table XXXIII shows the acceptable student loads recommended. These teaching loads were computed and averaged. Group averages for acceptable teaching load were 71.8 for the vocational agriculture instructors, 88.5 for the principals and 85.7 for the school superintendents. It was the writers opinion that the 71.8 average suudents per day would provide the vocational agriculture instructor with adequate time to supervise an effective and safe vocational agriculture program.

Point Where Student Load Requires an Additional Vo-Ag Instructor

TABLE XXXIV

THE STUDENT LOAD WHERE AN ADDITIONAL VO-AG INSTRUCTOR SHOULD BE EMPLOYED

NUMBER OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	11	8	11	12	11	12
40	3	2	2	2	1	1
50	2	1.5	0	--	1	1
60	6	4.5	3	3	9	10
70	20	15	7	7	6	7
80	19	14	6	6	6	7

TABLE XXXIV CONT.

NUMBER OF STUDENTS	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
90	15	11	3	3	9	10
100	30	22	24	25	22	24
110	11	8	10	11	8	8
120	12	9	9	10	11	12
Over 120	7	5	20	21	13	14
TOTAL	136	100	95	100	92	100
	Average 91.2		Average 103.3		Average 100.4	

Table XXXIV presents data obtained from vocational agriculture instructors, principals and school superintendents determining the point where an additional vocational agriculture instructor is needed. An average for each of the groups was computed with the over 120 column assuming 130. Principals were the highest with a 103.3 average student load, superintendents were next with a 100.4 average and vocational agriculture instructors were lowest with a 91.2 average. The writer concluded when a vocational agriculture student load is between 90 and 100 students per instructor an additional vocational agriculture instructor should be procured.

Involvement in Adult Education

The major portion of the 3 groups (62 percent of the vo-ag instructors, 48 percent of the principals and 45 percent of the superintendents) reported that they felt the vocational agriculture instructor should be involved in formalized adult education classes. It was the belief of the writer that adult education is one of the best public relation activities that can be found and that vocational agriculture instructors should make an attempt to be involved with adult education. This is shown in Table XXXV.

TABLE XXXV

INVOLVEMENT OF THE VOCATIONAL AGRICULTURE INSTRUCTOR WITH ADULT EDUCATION

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	11	8	10	11	15	16
Yes	84	62	46	48	41	45
No	37	27	33	35	32	35
Yes and No	4	3	2	2	1	1
Depends Local Need and Teacher	0	--	4	4	3	3
Total	136	100	95	100	92	100

Consideration of Adult Education Load

Seventy percent of the principals and 54 percent of the superintendents reported that adult education classes should not be considered when establishing acceptable studentsloads. Sixty-one percent of the vocational agriculture instructors disagreed and reported that adult education classes should be considered when establishing allowable student load. The writer would conclude that unless the agriculture instructor is teaching over 20 adults per week that no consideration should be made for adult education classes when establishing allowable student loads in vocational agriculture. This is shown in Table XXXVI.

TABLE XXXVI

CONSIDERATION OF ADULT CLASSES WHEN ESTABLISHING ALLOWABLE STUDENT LOAD IN VOCATIONAL AGRICULTURE

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	8	6	5	5	13	14
Yes	83	61	24	25	29	32
No	44	32	66	70	50	54

TABLE XXXVI CONT.

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
Yes and No	1	1	0	--	0	--
TOTAL	136	100	95	100	92	100

Opinion of Current Acceptability of Vo-Ag Teaching Load

Seventy-nine percent of the principals, 72 percent of the superintendents, and 51 percent of the vocational agriculture instructors reported that the current loads in vocational agriculture were acceptable. Forty-two percent of the vocational agriculture instructors felt that the current loads were unacceptable. It was the opinion of the writer that if almost one-half ofthe vocational agriculture instructors felt that they did not have the time to adequately supervise an effective multifaceted vocational agriculture program, that as student load increased more and more vocational agriculture instructors would find their student loads unacceptable. This data is shown in Table XXXVII.

TABLE XXXVII

ACCEPTABILITY OF CURRENT TEACHING LOAD IN VOCATIONAL AGRICULTURE

RESPONSE	VO-AG INST. NUMBER	VO-AG INST. PERCENT	PRINCIPALS NUMBER	PRINCIPALS PERCENT	SUPERINTENDENTS NUMBER	SUPERINTENDENTS PERCENT
No Answer	9	7	6	6	3	3
Yes	70	51	75	79	66	72
No	57	42	15	15	23	25
TOTAL	136	100	95	100	92	100

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

An attempt was made in this study to determine the opinion of vocational agriculture instructors, principals, and school superintendents in vocational agriculture districts in the state of Washington in respect to the importance of an acceptable teaching load in vocational agriculture. In addition, vocational agriculture instructors were asked to report current student loads.

Summary

The questionaire method was used to conduct this investigation. One hundred thirty-six present teaching load questionaires were returned for a 69 percent return rate. Three hundred thirty-five acceptable teaching load questionaires or 71 percent were returned. Twelve of the questionaires were returned blank and no data could be registered. The data showing current and acceptable teaching loads were computed on a percentage basis.

Seventy-seven percent of the 136 vocational agriculture instructors reported that they were full-time. Of the other 23 percent of the vocational agriculture instructors who are part-time, they reported an average of teaching 2 classes other than agriculture.

Forty seven percent of those vocational agriculture instructors reported having departments over 1 man. Forty-eight percent had 1 man departments.

Eighty-six percent of the vo-ag instructors teach 5 or 6 periods per day. One period per day is used by 84 percent for a preparation period.

Seventy-five percent of the vocational agriculture instructors reported teaching over 75 students per day. Seventeen percent of

these recorded having over 75 or more supervised farming projects.

Forty percent of the vocational agriculture instructors had from 1 to 30 students involved in a cooperative education program. Seventy-five percent of the vo-ag instructors reported that no time was allowed for supervision of supervised farming projects or cooperative education programs. Seventy-eight percent of these polled has less than 70 students in the FFA. Fifty percent of the vo-ag instructors spent more than 7 hours per week supervising the FFA.

Eleven percent of the agriculture teachers were teaching mostly horticulture while only 1 percent were teaching mostly forestry.

Sixty-five percent of the vo-ag instructors responded that they had inadequate time to supervise their vocational agriculture programs. Thirty-two percent found their classroom facilities inadequate and 51 percent reported that their shops were inadequate.

Three percent of the departments reported they had a decreasing enrollment while 71 percent reported their enrollment was on the increase. Additional vocational agriculture manpower was needed by 56 percent of those responding.

Vocational agriculture instructors ranked the classroom, shop, FFA, and supervised farming projects as the top 4 time consumers in a vo-ag program. Those areas that suffer first from the result of student overload were determined by the vo-ag teachers as supervised farming projects and FFA.

Twenty-six percent of the vo-ag instructors are teaching adult education classes with eighty percent of these teaching from 1 to 3 hours per week.

The consensus of the vocational agriculture instructors was 16.6 students as the most satisfactory in an agriculture classroom. School administrators felt 20.1 was the most satisfactory. The maximum number felt by the vo-ag instructors in the classroom was 21.2; principals reported the maximum at 25.4 and the superintendents at 24.7.

The optimum number of students in an agriculture shop was determined by the vo-ag instructors as 14.5. Principals felt 16.3 and superintendents 16.0 was the optimum. Maximum agriculture shop load was estimated at 17.3 by the vo-ag instructors. Principals and superintendents felt the maximum load should be 19.1 and 19.2 respectively in an agriculture shop.

One class period was indicated by 72 percent of the vo-ag instructors, 91 percent of the principals, and 87 percent of the superintentents as adequate preparation time for classroom and shop per day.

Vocational agriculture instructors reported 7.6 hours as the average number of hours needed to supervise the FFA. Principals reported 5.3 hours and superintendents reported 5.2 hours to be adequate.

It was reported by vo-ag instructors, principals, and superintenddnts that 5 to 8 hours per week should be spent with supervised farming projects.

Acceptable cooperative education student load averages for vo-ag instructors was determined by the agriculture teachers as 13.3, by the principals as 30.5 and the superintendents as 29.7. Vocational agriculture instructors felt that 2.0 hours per student per week would be adequate for a student in a cooperative education program. Principals

reported 2.3 hours per student per week and superintendents felt that 1.6 hours per student per week would be sufficient.

Classroom and Shop was agreed by all 3 groups as where the most amount of time should be spent by the vocational agriculture instructor.

Twenty-five percent of the vo-ag instructors, 21 percent of the principals, and 18 percent of the superintendents reported areas where too much time was being exerted in the current vocational agriculture program. The major areas listed by the 3 groups were FFA, judging contests, classroom, and shop.

Sixty-five percent of the vocational agriculture instructors, 42 percent of the principals, and 35 percent of the superintendents reported areas where more time needs to be exerted by current vo-ag programs. The 4 major areas listed by the 3 groups were supervised farming projects, shop, FFA, and classroom.

Vo-ag instructors reported an average of 71.8 individual students as an acceptable daily teaching load. Principals average response was 88.5 individual students while superintendents reported an average of 85.7 individual students. The point where an additional vo-ag instructor needs to be added was reported by vo-ag instructors as 91.2 individual students. Principals reported an average of 103.3 individual students and superintendents reported 100.4 individual students.

Sixty-two percent of the vo-ag instructors, 48 percent of the principals, and 45 percent of the superintendents reported that they felt that the vo-ag instructor should be involved in formalized adult education. Seventy percent of the principals and 54 percent of the

superintendents responded that adult education classes should not be considered when computing acceptable student load. Vocational agriculture instructors disagreed and 61 percent of these reported that adult education classes should indeed be considered when calculating acceptable student load.

Seventy-nine percent of the principals, 72 percent of the superintendents, and 51 percent of the vo-ag instructors reported that the current loads in their vocational agriculture program were acceptable.

Conclusions

From the data gathered in this study, the writer was able to recommend an acceptable teaching load in vocational agriculture.

It was concluded by the author that enough knowledge and familiarity is not known about the cooperative education program in vocational agriculture. Horticulture and forestry are overall a minor part of a vocational agriculture program.

Inadequate time for supervision of the total vocational agriculture program is allowed for the majority of the vocational agriculture instructors. A majority of the vo-ag shop are inadequate and that enrollment in the vocational agriculture programs is 23.6 times as much on the increase as on the decrease.

The majority of the vocational agriculture programs in Washington need more vo-ag instructors than they already have.

Supervised farming projects and the FFA are the first to suffer as a result of a student overload in vocational agriculture. Between 5 to 8 hours each per week is needed to supervise the FFA and supervised farming projects.

Thirteen to 30 students should be able to be supervised in a cooperative education program allowing from 1/2 to 1 hour per student per week for supervision by the vocational agriculture instructor.

Junior and community colleges are teaching a major portion of the adult education but the vocational agriculture instructor should make an attempt to be involved in adult education and that if a vocational agriculture instructor teaches more than 20 adults that consideration be made on his student load.

Between 16 and 20 students in the optimum in an agriculture classroom and the maximum should never exceed 25 students. In a vocational agriculture shop class there should be between 14 and 16 but should never exceed 19. One class period per day is adequate preparation time for the classroom and shop. Most of the time should be spent in the classroom and shop. More effort should be exerted in the Supervised farming projects, FFA, Shop, and Classroom.

An acceptable teaching load in vocational agriculture is between 75 and 80 individual students and when the number of individual students reaches between 90 and 100 an addition teacher is needed.

Recommendations

1. More information and exposure of cooperative education programs be given to school superintendents, principals and vocational agriculture instructors.
2. More time be designated by the school district for supervision of the multifaceted vocational agriculture program.
3. The maximum number of students in an agriculture classroom remain between 16 and 20 students and the maximum number for the shop remain between 14 and 16 students.
4. More effort be placed in the areas of supervised farming projects, shop, FFA and the classroom.
5. A full-time acceptable teaching load of between 75 and 80 individual students be maintained for an effective and safe vocational agriculture program.
6. When individual student load in vocational agriculture reaches 90 to 100 than an additional vocational agriculture instructor be hired.
7. Vocational agriculture instructors make an attempt to involve themselves in adult education.

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APPENDIX

Name_____

Position_____

School_____

Please circle the letter for your answer or fill in the answer in the space given.

1. Is your school considered rural, suburban, or metropolitan?

   a. rural b. suburban c metropolitan

2. Approximately how many students are enrolled in your high school? (Grades 9-12) a._____

3. What type of scheduling is your school using?

   a. Semester
   b. Trimester
   c. Other, please state_____

4. How many periods are in your school day?
   a. 1-4 b. 5 c. 6 d. 7

5. How long do your class periods meet?

   a. 45 minutes
   b. 50 minutes
   c. 55 minutes
   d. 60 minutes
   e. Other, please state_____

6. How many vocational agriculture instructors teach in your agriculture program?
   a. _____

7. Ideally, what would you consider the most satisfactory number of students that can be taught effectively in each agriculture class?

   a. 5-12
   b. 13-15
   c. 16-18
   d. 19-22
   e. 23-26
   f. 27-30

8. What is the maximum number of students that you consider can be taught effectively in an agriculture class?

   a. 10-15
   b. 16-20
   c. 21-24
   d. 25-28
   e. 29-32
   f. 33-35

9. Ideally, what would be the optimum number of students that could be taught effectively and safely in each agriculture shop class?

   a. 1-6
   b. 7-10
   c. 11-13
   d. 14-16
   e. 17-20

10. What is the maximum number of students that you consider can be taught effectively and safely in the agriculture shop class?

a. 7-10
b. 11-13
c. 14-16
d. 17-20
e. 21-24

11. In your opinion, what would be adequate preparation time per day for vocational agriculture classes?

a. Less than one of your class periods
b. 1 class period
c. 2 class periods

12. How many hours should be spent by the vocational AGRICULTURE instructor supervising the FFA per week?

a. none
b. 1-6
c. 7-12
d. 13-16
e. 17-20
f. over 20

13. How many hours should be spent by the vocational agriculture instructor with supervised farming projects per week?

a. none
b. 1-4
c. 5-8
d. 9-12
e. 13-16
f. over 16

14. How many students should be supervised effectively per semester in a cooperative experience program? a._____

15. How many hours are required for supervision of each student in a cooperative experience program per week? a._____

16. Rank in order, (1,2,3,4,....) the following areas where the most amount of time should be spent. Place the one which should have the most time spent on it first down the line to the one that should use the least time.

a. _____Classroom b._____Shop c._____FFA
d. _____Supervised farming projects e._____Cooperative education programs

17. Is there an area where you feel too much time and effort are being placed?
a. Yes, If so, which area _____
b. No

18. Is there an area where you feel that more time and effort should be placed?
a. Yes, If so, which area _____
b. No

19. What do you consider to be a full-time teaching load in vocational agriculture program per agriculture teacher?

a. 40 students
b. 50 students
c. 60 students
d. 70 students
e. 80 students
f. 90 students
g. 100 students

20. Do you believe the vocational agriculture teacher should be involved in formalized adult classes?
a. yes
b. no

21. Should adult classes be a consideration when establishing allowable student load?

a. yes b. no

22. When there is evidence for expansion of the Vo-Ag program in the community, at approximately what point should an additional teacher be employed? When the average teacher of vocational agriculture has:

a. 40 students
b. 50 students
c. 60 students
d. 70 students
e. 80 students
f. 90 students
g. 100 students
h. 110 students
i. 120 students
j. over 120 students

23. Do you feel your school has an acceptable teaching load in vocational agriculture?

a. yes b. no

If yes, state reasons why it is an acceptable teaching load. If no, state what problems exist and how you feel it can be corrected.

Bob Gallagher
1165 East 90
Tacoma, Wn. 98445

An excessive teaching load is one that undoubtably faces every teacher and administrator in the profession at one time or another. It may show itself when an additional instructor is needed to adequately meet the agricultural education of a community.

In Washington, it is believed that supervised farming projects and cooperative education programs as well as the FFA are basic to vocational agriculture. To provide adequate programs in these named areas seems too much to expect of a vocational agriculture instructor who has 90, 100, or 125 different individual students enrolled in his/her classes.

A questionaire was developed with the help of Dr. Joseph Cvancara, Agricultural Education Teacher-Trainer at Washington State University to use in this study. It is designed to be an evaluation of an acceptable teaching load in vocational agriculture as determined by school superintendents, principals, and vocational agriculture instructors in the state of Washington.

As a school administrator in a vocational agriculture district, your cooperation in filling out this questionaire is vital.

The results of this study to determine what an acceptable vocational agriculture teaching load is will be published and a copy available to you to be mailed out at the end of July.

Please fill out this questionaire and mail it back to me in the enclosed stamped return envelope by May 8, as time is of the essence for tabulation of this questionaire.

Thank you for your prompt reply.

Sincerely yours,

Bob Gallagher

Bob Gallagher
Vo-Ag Instructor
Franklin Pierce H.S.

Bob Gallagher
1165 East 90th
Tacoma, Wn. 98445

Dear Vocational Agriculture Instructor:

An excessive teaching load is one that undoubtably faces every teacher in the profession at one time or another. It may show itself when an additional teacher is needed to adequately meet the agricultural education of a community.

In Washington, it is believed that supervised farming projects and cooperative education programs as well as the FFA are basic to vocational agriculture. To provide adequate programs in these named areas seems too much to expect of a vocational agriculture instructor who has 90, 100, or 125 different indivuals enrolled in his/her classes.

Two questionaires were developed with the help of Dr. Joseph Cvancara, Agricultural Education Teacher-Trainer at WSU to use in this study. The first questionaire (Form A) is designed to be an evaluation of an acceptable teaching load in vocational agriculture. The second questionaire (Form B) is designed to determine the present teaching load of vocational agriculture teachers.

As a vocational agriculture instructor, your cooperation in filling out these two questionaires is vital. Your superintendent and principal will each receive Form A.

The results of this study to determine what an acceptable vocational agriculture teaching load is will be published and a copy available to you to be distributed at the WVATA conference in July.

Please fill out these questionaires immediately and mail them back to me in the enclosed return envelope by May 1 or shortly thereafter.

Thank you for your prompt reply.

Sincerely yours,

Bob Gallagher

Bob Gallagher
Vo-Ag Instructor
Franklin Pierce H.S.

Name _____

School _____

Please circle the letter for your answer or fill in the answer in the space provided.

1. Are you a full-time agriculture instructor?

   a. yes
   b. no, if not please indicate the number of classes you teach other than agricultural classes _____

2. How many vocational agriculture instructors teach in your agriculture program?

   a. _____

3. Is your school considered:

   a. rural
   b. suburban
   c. metropolitan

4. Approximately, how many students are enrolled in your high school? (Grades 9-12)

   a. _____

5. What type of scheduling is your school using:

   a. semester
   b. trimester
   c. other, please state _____

6. How many periods are in your school day?

   a. 1-4
   b. 5
   c. 6
   d. 7

7. How many PERIODS do you teach per day.

   a. _____

8. How long is your class period?

   a. 45 minutes
   b. 50 minutes
   c. 55 minutes
   d. 60 minutes
   e. over 60 minutes

9. How much conference or class preparation time are you allowed during the regular day?

   a. none
   b. less than one class period
   c. 1 class period
   d. 2 class periods

10. List the number of students for each agriculture class period which you instructed or supervised this preceding semester. Please mark whether it was shop or class.

	no. of students	period	class	shop
a.	_____	1		
b.	_____	2	_____	_____
c.	_____	3	_____	_____
d.	_____	4	_____	_____
e.	_____	5	_____	_____
f.	_____	6	_____	_____
g.	_____	7	_____	_____

11. How many individual students do you teach each day?

a. 0-49
b. 50-74
c. 75-99
d. 100-125
e. over 125

12. How many of your students have supervised farming projects?

a. none
b. 1-25
c. 26-50
d. 61-75
e. over 75

13. How many stduents do you supervised in an approved cooperative experience program?

a. none
b. 1-10
c. 11-20
d. 21-30
e. over 30

14. How much time are you allowed for supervision of supervised farming projects and cooperative experience programs during the regular school day per week?

a. none
b. 1-4 hours
c. 5-8 hours
d. 9-12 hours
e. over 12 hours

15. How many students in your agriculture classes are members of the FFA?

a. _____

16. On the average, how many hours per week are spent working with the FFA?

a. none
b. 1-6
c. 7-12
d. 13-16
e. over 16

17. How many hours of horticulture classes do you teach each day?

a. none
b. 1
c. 2-3
d. 4-5
e. 6-7

18. How many hours of forestry classes do you teach each day?

a. none
b. 1
c. 2-3
d. 4-5
e. 6-7

19. Do you have adequate time to instruct and supervise your vocational agriculture program?

a. yes
b. no

20. Are your FACILITIES adequate to handle the number of students you have?

a. classroom yes __ no __ b. shop yes __ no __

21. What is the enrollment in your agriculture classes doing?

a. increasing
b. decreasing
c. remaining the same

22. How many vocational agriculture instructors should there be in your agriculture program? a. ____

23. Rank in order, (1,2,3,4,...) the following areas that require the most accounting of your time per week?

a. _____ classroom
b. _____ shop
c. _____ FFA
d. _____ supervised farming projects
e. _____ cooperative education programs

24. Rank in order, (1,2,3,4,...) the following areas that suffer because of overload, putting the one which suffers most down first to the one that suffers least?

a. ____ classroom
b. ____ shop
c. ____ FFA
d. ____ supervised farming projects
e. ____ cooperative education program

25. How many adults are enrolled in your adult classes?

a. none
b. 1-20
c. 21-40
d. over 40

26. How many hours of adult classes do you teach each week?

a. none
b. 1-3
c. 4-6
d. 7-9
e. over 10